AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (currently amended): A method for manufacturing a ~~throwaway tip~~sintered object, comprising:

press-forming a raw material powder to obtain a green compact ~~for the throwaway tip~~;

placing the green compact on a sintering plate; and

sintering the green compact ~~isotropically and uniformly~~,

wherein ~~the green compact is sintered so that a volume of deformation in a shrinking direction for a shape and dimension to be given to the throwaway tip after sintering is gradually increased in a predetermined direction, and~~ a difference between a shape and dimension of the green compact and a shape and dimension of a desired sintered object is gradually decreased in a predetermined direction; and

wherein the green compact is placed on the sintering plate so that the predetermined direction is oriented substantially toward ~~the~~ an outer circumference of the sintering plate in plan view.

Claim 2 (canceled).

Claim 3 (currently amended): The method for manufacturing a ~~throwaway tip according to Claim 1,~~sintered object, comprising:

press-forming a raw material powder to obtain a green compact;

placing the green compact on a sintering plate; and

sintering the green compact,

wherein the green compact is press-formed so that the density of the green compact made of the raw material powder is gradually decreased in a predetermined direction,

wherein the green compact is placed on the sintering plate so that the predetermined direction is oriented substantially toward an outer circumference of the sintering plate in plan view ~~so that a volume of deformation in a shrinking direction for the shape and dimension to be given to the throwaway tip after sintering is gradually increased in the predetermined direction~~.

Claim 4 (currently amended): The method ~~for manufacturing a throwaway tip~~ according to Claim 3,

wherein~~,~~ when the green compact is press-formed by filling ~~the~~ a raw material powder into a cavity formed in a die, ~~the~~ a quantity of the raw material powder filled into the cavity is controlled in the predetermined direction of the green compact after the press forming.

Claim 5 (currently amended): The method ~~for manufacturing a throwaway tip~~ according to Claim 4, further comprising:

providing a lower punch in the cavity having an opening in the top face of the die to move vertically relative to the die; and

providing a raw material powder feed box above the top face of the die to move across the top face, whereby, when the raw material powder feed box is moving on the opening of the cavity, the raw material powder is supplied from the raw material powder feed box and filled into the cavity while the lower punch is vertically moved so that the filling quantity of the raw material powder is controlled in the predetermined direction.

Claim 6 (currently amended): The method ~~for manufacturing a throwaway tip~~ according to Claim 3, further comprising:

filling ~~the~~ a raw material powder into ~~the~~ a cavity formed in ~~the~~ a die; and

scraping an upper portion of the filled raw material powder,

wherein the green compact is press-formed by selecting a direction opposite to the scraping direction as the predetermined direction.

Claim 7 (currently amended): The method ~~for manufacturing a throwaway tip~~ according to Claim 3,

wherein the green compact is pressed-formed with a shape and dimension so that ~~dimension~~ a difference between ~~the~~ a shape and dimension of the green compact and a shape and dimension of a desired sintered object ~~the throwaway tip after sintering~~ is gradually decreased in the predetermined direction.

Claim 8 (currently amended): The method ~~for manufacturing a throwaway tip~~ according to Claim 1,

wherein a plurality of the green compacts are radially or concentrically placed on the sintering plate in plan view.

Claim 9 (currently amended): The method ~~for manufacturing a throwaway tip~~ according to Claim 1,

wherein a plurality of the green compacts are placed on the sintering plate in a lattice or zigzag shape in plan view,

wherein the plurality of green compacts placed on the sintering plate are divided into a plurality of green compact groups respectively extending from an inner circumferential ~~center~~ portion of the sintering plate toward the outer circumference thereof in plan view, and

wherein ~~the orientations of~~ the predetermined directions of the green compacts in the same green compact group are ~~made~~ parallel to each other.

Claim 10 (currently amended): An apparatus for aligning a green compact, comprising:

a conveyance mechanism for holding, conveying, and aligning a green compact;

a sintering plate on which ~~a~~ the green compact is placed and aligned by the conveyance mechanism, ~~the green compact being formed by press-forming a raw material powder,~~

wherein the green compact is placed on the sintering plate so that a predetermined direction of the ~~press-formed~~ green compact is oriented substantially toward ~~the~~ an outer circumference of the sintering plate in plan view.

Claim 11 (currently amended): The apparatus for aligning a green compact according to Claim 10,

wherein a plurality of the green compacts are radially or concentrically placed on the sintering plate in plan view by the conveyance mechanism.

Claim 12 (currently amended): The apparatus for aligning a green compact according to Claim 10,

wherein a plurality of the green compacts are placed on the sintering plate in a lattice or zigzag shape in plan view, wherein the plurality of green compacts placed on the sintering plate are divided into a plurality of green compact groups respectively extending from an inner

circumferential ~~center~~ portion of the sintering plate ~~to~~toward the outer circumference thereof in plan view, and

wherein ~~the orientations~~the predetermined directions of the green compacts in the same green compact group are ~~made~~ parallel to each other.

Claim 13 (currently amended): The apparatus for aligning a green compact according to Claim 10, further comprising:

a sintering plate holder for horizontally holding the sintering plate; ~~and~~

~~a conveyance mechanism for holding and conveying the green compact to be placed on the sintering plate,~~

wherein the sintering plate holder has a rotation mechanism for positioning and rotating the sintering plate at each predetermined angle of rotation around its vertical axis.

Claim 14 (new): The method according to claim 1, wherein the sintered object is a throwaway tip.

Claim 15 (new): The method according to claim 3, wherein the sintered object is a throwaway tip.

Claim 16 (new): The method according to Claim 3,

wherein a plurality of the green compacts are radially or concentrically placed on the sintering plate in plan view.

Claim 17 (new): The method ~~for manufacturing a throwaway tip~~ according to Claim 3,

wherein a plurality of the green compacts are placed on the sintering plate in a lattice or zigzag shape in plan view,

wherein the plurality of green compacts placed on the sintering plate are divided into a plurality of green compact groups respectively extending from an inner circumferential portion of the sintering plate toward the outer circumference thereof in plan view, and

wherein the predetermined directions of the green compacts in the same green compact group are parallel to each other.